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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,420	12/04/2003	Paul Reuben Day	ROC920030314US1	7728

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EXAMINER

NGUYEN, MERILYN P

ART UNIT	PAPER NUMBER
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2163

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/727,420

Applicant(s)

DAY ET AL.

Examiner

Merilyn P. Nguyen

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/04/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-20 are pending in this action.

Acknowledges

2. Receipt is acknowledged of the following items:

Information Disclosure Statement (IDS) filed on 12/04/2003 and made of record. The references cited on the PTOL 1449 form have been considered.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-6 and 11-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claimed invention (Claims 1-5) recites a method comprising detecting a trigger exists, wherein the trigger indicates a potential need to rebuild a saved accessed plan associated with a query and determining whether a previous job associated with the trigger created a new access plan that was identical to the saved access plan which do not provide tangible results. The detecting and determining steps are claimed without any outcome result suggesting what these steps are being applied on. Moreover, for it to be a tangible result, it must be more than just a thought or a computation. Instead, it must have real world value rather than being an abstract result.

Claimed invention (Claim 6) recites an apparatus comprising means for detecting, means for determining and means for performing the query with the saved access plan if the determining is true without producing any assured, repeatable result from. For example, performing the query can't be applied with the saved access plan if the determining step is false, thus providing no assured and repeatable result. The claim is concrete if it produces an assured, repeatable result (e.g., same input produces the same output each time the steps are performed).

Claims 11-15 does not produce tangible result since it includes instructions that perceived absent the tangible medium embodied through which they are conveyed. The claims recites "a signal-bearing medium" which is not a tangible medium instead it's transmitting medium.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 6, 11 and 16, the term "potential" is indefinite because it does not comprise a unique meaning, instead the meaning is open to interpretation depending on the application and the reader.

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Regarding claims 1-5, 6-9, 11-13 and 16-17, the terms “whether” and “if” renders the claim indefinite because terms “whether” and “if” are relative terms and the specification does not provide a standard for ascertaining the requisite degree.

Regarding claims 1-20, these claims are indefinite and incomplete in that it fails to point out what is included or excluded by the claim language. The claims recite “rebuild a saved access plan”; however, it’s unclear how the saved access plan is rebuild since it appears in all the claims that the claims recite creating “a new access plan” and comparing the differences between the new access plan with the saved access plan; then, if it’s different the saved access plan is replaced with the new access plan and if it’s not different the saved access plan is needed to perform query. Thus, there is no rebuilding a saved access plan as claimed. Moreover, claims recite “determining **whether a previous job** associated with the trigger **created a new access plan that was identical to the saved access plan**” and later on recite “if the determining is false, **creating the new access plan** and **comparing** the saved accessed plan with the new access plan” which seems to be contradicted to each other. For example, “determining whether a previous job associated with the trigger created a new access plan that was identical to the saved access plan” means “a new access plan” is already created and compared to the saved access plan to see if they are identical. Therefore, the recitation of “if the determining is false, creating the new access plan and comparing the saved accessed plan with the new access plan” is redundant and makes no sense. The Applicant is respectfully suggested to clarify all the claims.

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Due to the vagueness and a lack of clear definition of the terminology and phrases used in the specification and claims, and due to the incomplete relationship between limitations, the claims have been treated on their merits as best understood by the examiner.

The Applicant is responsible for fixing all other 112 problems if it exists in the claims beside those that the Examiner addressed above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis (US 6,366,901).

Regarding claim 1, Ellis discloses a method comprising: detecting that a trigger exists, wherein the trigger indicates a potential need to rebuild a saved access plan (execution plan) associated with a query (See col. 8, line 54 to col. 9, line 10); and determining whether a previous job associated with the trigger created a new access plan that was identical to the saved access plan (See col. 9, lines 11-13 and 15-40).

Regarding claim 2, Ellis further discloses if the determining is false, creating the new access plan and comparing the saved access plan with the new access plan (See col. 9, lines 11-40 and col. 11, lines 6-55).

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Regarding claim 3, Ellis further discloses if the comparing determines that the saved access plan is identical to the new access plan, performing the query via the saved access plan (See col. 9, lines 9-10 and 28-32).

Regarding claim 4, Ellis discloses if the comparing determines that the saved access plan is different from the new access plan, replacing the saved access plan with the new access plan and performing the query with the new access plan (See col. 9, lines 60-65 and col. 11, lines 38-39 and col. 12, lines 10-14).

Regarding claim 5, Ellis discloses if the determining is true, performing the query with the saved access plan (See col. 9, lines 9-10 and 28-32).

Regarding claims 6-9, Ellis discloses an apparatus comprising means (Fig. 4) for performing steps addressed in claims 1-5.

Regarding claim 10, Ellis discloses wherein means for determining comprises a condition (Even 98, Fig. 4) in a program object associated with the query (See col. 6, lines 50-58).

Regarding claims 11-13, these claims recites all the claimed subject matter as addressed above in claims 1-5, thus rejected the same.

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Regarding claim 14, Ellis discloses wherein the trigger comprises a new version (schema version) of at least a portion of a data management system (See col. 8, line 66 to col. 9, line 14).

Regarding claim 15, Ellis discloses wherein the trigger comprises a change of a file size in a database to which the query is directed (See col. 5, lines 55-57).

Regarding claims 16-17, Ellis discloses an electronic device (Computer 20, Fig. 1) comprising a processor (processing unit 21, Fig. 1) and a storage devices (Hard disk drive 32, Fig. 1) encoded with instructions when executed performing steps addressed in claims 1-5.

Regarding claims 18-19, this claim recites the same subject matter as addressed above in claims 14-15, thus rejected the same.

Regarding claim 20, Ellis discloses wherein the trigger comprises a new index in a database (See col. 5, lines 52-57).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ellis U.S Patent No. 6,847,978 discloses automatic database statistics creation.

Brown US 2003/0093408 discloses index selection in a database system.

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Nica US 2004/0006561 discloses system and methodology for generating bushy trees using a left-deep tree join enumeration algorithm.

Levy U.S Patent No. 6,711,560 discloses method of executing conflicting triggers in an active database.

Nelson U.S Patent No. 5,778,364 discloses evaluation of content of a data set using multiple and/or complex queries.

Kabra U.S Patent No. 6,732,084 discloses method and apparatus for parallel execution of trigger actions.


Attaluri U.S Patent No. 6,466,931 discloses method and system for transparently caching and reusing query execution plans efficiently.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marilyn P Nguyen whose telephone number is 571-272-4026.

The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


MN
May 10, 2006


DON WONG
SUPERVISORY PATENT EXAMINER